

AN ECONOMIC ANALYSIS OF PRODUCTION AND MARKETING OF PEPPER IN KERALA

Rinu Jose¹ & Sreeja. S²

¹Assistant Professor, Department of Economics, Kuriakose Elias College, Mannanam, Kottayam, Kerala, India

²Associate Professor, Department of Economics, Sree Sankara College, Kalady, Kerala, India

Received: 15 Jun 2018

Accepted: 20 Jun 2018

Published: 23 Jun 2018

ABSTRACT

Pepper is produced in the tropical regions of the world. The major producers of pepper in the world are Vietnam, Brazil, India, Indonesia, Srilanka etc. Pepper cultivation is concentrated on the Western Ghats in India. Kerala and Karnataka are the major pepper producing states in India. The present study examines the production and marketing of pepper in Kerala. The empirical results of the study show that there has been a decline in the area, production, and productivity of pepper in Kerala. There was negative growth rate in the area, production, and productivity during 2001-16. The marketing cost was found higher in Channel-5 and lowest in Channel-1. The price spread was higher in Channel-5 and lowest in Channel-3. Producers should be given more access to credit facilities which will reduce their reliance on non-institutional sources and increase their bargaining power.

KEYWORDS: *Marketing Channel, Marketing Cost, Price Spread*

INTRODUCTION

India is known as the “Land of Spices”. More than 25 spices are commercially grown in India. India is the largest producer, consumer, and exporter of spices in the world. Pepper, cardamom, chili, ginger, turmeric, coriander, cumin etc. are the major spices produced in India. Pepper is known as the “King of Spices” is indigenous to the Western Ghats of South India. India accounts for 24.43% of the total area under cultivation and 10.06 percent of the total pepper production in the world in 2016(FAO). Pepper accounts for 3.81 percent of the area under cultivation and contributes to 10.66 percent of the total spices export earnings in India in 2016(Spices Board).

The major producers of pepper in the world are Vietnam, Brazil, India, Indonesia, Srilanka etc. Kerala, Karnataka and Tamil Nadu are the major pepper producing states in India. In 2016, Kerala, Karnataka and Tamil Nadu accounted for 43.30 percent, 47.42 percent and 3.09 percent of production respectively. Idukki and Wynad districts are the major pepper producing districts in Kerala. Cochin, Alleppey, Calicut, Mumbai are the major pepper markets and pepper is exported to U.S.A, U.K, Germany, Sweden, Japan, Netherlands, UAE etc. Pepper is grown mainly by small and medium farmers in the state. Hence the demand, supply and price conditions affect the income and livelihood of the farmers in this region. Marketing Channels refers to the various routes of flow of product from producers to ultimate consumers. An efficient supply chain provides remunerative prices to the farmers which will in turn, boost production and productivity. The present study examines the production and marketing of pepper in Kerala.

OBJECTIVES

The objectives of the study are to

- To study the trends in the area, production and productivity of pepper in Kerala
- To study the marketing channels of pepper in Kerala
- To study the price spread of pepper in Kerala

METHODOLOGY

The study is based on both primary and secondary data. Secondary data on area, production, and productivity of pepper in Kerala is collected from Spices Board, Kochi. Primary data is collected from 180 sample farmers producing pepper in three major production centers namely of Nedumkandam, Karunapuram, Udumbanchola panchayats in Idukki district of Kerala using stratified random sampling techniques. 15 village traders, 3 upcountry wholesalers, 3 pre-harvest contractors are selected from these panchayats. 3 internal wholesalers and 3 exporters are selected from Kochi. Compounded annual growth rate analysis is used to estimate the trends in the area, production, and productivity of pepper in Kerala.

FINDINGS AND DISCUSSIONS

Trends in Area, Production, Productivity

Table1: Compounded Annual Growth Rate of Pepper in Kerala

Year	Area	Production	Productivity
1981 -1990	5.67***	8.40**	2.59
1991-2000	1.33	2.55**	2.53**
2001-16	-7.22***	-9.27***	-1.91
1981-2016	0.27	-0.45	-0.72

Note: ***1% Significant level; ** 5% Significant level; * 10% Significant level

Source: Computed on the basis of data from Spices Board, Kochi

There was a positive growth rate of 5.67 percent in the area under pepper during 1981-1990. During 2001-16 the compounded annual growth rate of the area under pepper declined to -7.22 percent. A compound annual growth rate of the area under pepper during 1981-2016 was 0.27 percent.

There was a positive growth rate in production of pepper during 1981-1990 and 1991-2000. The compounded annual growth rate of pepper production during 2001-16 declined to -9.27 percent. During 1981-2016 the growth rate of pepper production was -0.45 percent.

The productivity of pepper has shown a positive growth rate of 2.59 percent in 1981-1990 and 2.53 percent in 1991-2000. Productivity has declined to -1.91 in 2001-16. During the overall period from 1981 to 2016 pepper productivity declined to -0.72 percent.

Marketing Channels of Pepper in Kerala

Majority of the pepper farmers in Kerala are small and medium farmers. Pepper farmers in the study are sold their crop mainly to village traders, pre-harvest contractors and upcountry wholesalers. Since the majority of the small and

medium farmers sell pepper to village traders, they are the main intermediary in the regional market. Village traders and upcountry wholesalers sell the products purchased from the farmers to the wholesalers and exporters. Majority of the pepper produced in Kerala reaches the market at Cochin and is exported to various markets and countries. 64.44 percent of the sample farmers in the study area sold pepper to village traders. 30.56 percent sold the produce to upcountry wholesalers and only 5 percent of farmers sold their produce to pre-harvest contractors.

Five major marketing channels are identified in trade of pepper in Kerala:

Marketing Channel-1

In this supply chain, the trade of pepper by the farmers is through village trader, upcountry wholesaler and to the internal wholesaler.

Marketing Channel-2

In this marketing channel, the trade of pepper from the farmer is through village trader, upcountry wholesaler, and to the exporter.

Marketing Channel-3

In this supply chain, the sale of pepper by the farmers is through an upcountry wholesaler and to the internal wholesaler.

Marketing Channel-4

The trade of pepper in this marketing channel, from the farmers is through the upcountry wholesaler to the exporter.

Marketing Channel-5

In this supply chain, the pepper produced by the farmers are sold to pre-harvest contractor, village trader, upcountry wholesaler and to the exporter.

Marketing Costs of the Intermediaries Involved in Pepper Trade

The marketing costs consists of the expenses incurred by the various intermediaries for packaging, loading, transportation, license fee etc.

Marketing Cost of Farmers

The marketing cost of farmers mainly consists of the cost of transportation to village traders and upcountry wholesalers which are estimated at Rs.152 per quintal and Rs.480 per quintal respectively.

Marketing Cost of Pre-Harvest Contractors

The marketing cost of pre-harvest contractors mainly consists of the cost of harvesting (Rs.2021), drying (Rs.540.60), packaging (Rs.30.15) and transportation (Rs.265.80). The total marketing cost was estimated at Rs.2857.55 per quintal

Marketing Cost of Village Traders

The marketing cost of village traders mainly involves of the expenses incurred for rent of shops, registration, electricity, tax(Rs.55.28); packaging and loading (Rs.15.50); transportation (Rs.120.68), and other expenses including staffing, depreciation(Rs.14.23). The total marketing cost was estimated at Rs.205.69 per quintal

Marketing Cost of Upcountry Wholesalers

Rent of shops, registration, and electricity, tax (Rs.60.64); packaging and loading (Rs.17.23); transportation (Rs.121.20); brokerage (Rs.50.50) and other expenses (Rs.6.25) are the major expenses involved in the marketing cost. The total marketing cost of upcountry wholesalers was estimated at Rs. 255.82 per quintal.

Marketing Cost of Internal Wholesalers

The total marketing cost of upcountry wholesalers was estimated at Rs.382.72 per quintal which includes rent of shops, registration, and electricity, tax (Rs.73.50); packaging and loading (Rs.55.80);brokerage(Rs.65.20),washing, drying and grading(Rs.61.52),polishing and winnowing (Rs.80.50)and staffing and other expenses (Rs.46.20).

Marketing Cost of Exporters

The total marketing cost of exporters was estimated at Rs.617.2 per quintal which includes rent of shops, registration, and electricity, tax (Rs.98.40); packaging and loading (Rs.105.45); transportation (Rs.121.50); brokerage (Rs.62.40), washing, drying and grading (Rs.67.00),polishing and winnowing (Rs.82.30)and staffing, export inspection fees and other expenses (Rs.80.15).

Marketing Margin and Price Spread in Pepper Trade

Marketing margin shows the profits earned by the intermediaries involved in pepper trade. It is estimated by considering the price received and price paid by the intermediaries after subtracting the marketing expenses involved. Price spread denotes the difference between the selling price of exporters/internal wholesalers and the price received by the farmers.

Table 2: Price Spread of Various Marketing Channels

Sl. No	Item	Channel1	Channel 2	Channel 3	Channel 4	Channel 5
1	Farmer's share in export price	84.20	80.54	87.02	83.80	65.30
2	Marketing Cost	6.50	8.26	7.81	8.54	22.52
3	Marketing Margin	8.90	10.92	6.20	8.20	13.12
4	Price Spread	15.4	19.18	14.01	16.74	35.64

Source: Primary Data

The price spread of various marketing intermediaries is shown in table-1. The maximum price spread was observed in Channel 5. Among the various marketing channels, in case of Channel 3, the observed price spread is lowest since the number of intermediaries involved in the trade is small. The price spread in Channel 1,2, 4 were 15.4 percent, 19.18 percent, and 16.74 percent respectively. The most commonly followed channels of marketing were channel 1 and channel 2.

CONCLUSIONS

Sustainable development of the economy depends upon the performance of the agriculture sector. Pepper, which is a significant foreign exchange earner and a source of income and employment to millions of people, requires planned and continuous attention. The empirical results of the study show that there has been deterioration in the area, production, and productivity of pepper in Kerala. The marketing cost was found higher in Channel-5 and lowest in Channel-1. The price spread was higher in Channel-5 and lowest in Channel-3. Producers should be given more access to credit facilities which will reduce their dependence on non- institutional sources and increase their bargaining power.

REFERENCES

1. Agarwal, N. L 1998 Marketing costs, margins and price spread for major agricultural commodities of Rajasthan. *Indian Journal of Agricultural Marketing* 12(3) : 122-132.
2. Mohapatra S.C.2001 "Production and marketing of onion in Bolangir district of Orissa", *The Bihar Journal of Agricultural Marketing*, 9(2):25-26,
3. Naidu M R, Raju V T, Bhramaiah P and Pandurangadu K 1988 A comparative study of different marketing supply chains of green chillies in Guntur district of Andhra Pradesh. *Indian Journal of Agricultural Marketing* 2:80-81
4. George, P.S. ,K. N. Nair and Pushpangathan, K.1989.*The Pepper Economy of India*, Oxford and IBH Publishing Co. Pvt. Ltd., New Delhi.
5. Kumar, HS Naveen. *Value Chain Analysis of Black Pepper in Karnataka. Diss. University of Agricultural Sciences, GKVK, 2013.*
6. Uma Gowri, M. and Shanmugam, T.R. 2014.*An Economic Analysis of Production and Marketing of banana in India.American International Journal of Research in Humanities, Arts and Social Sciences*,9(3): 234-240
7. *Government of India. 2004. Spices Statistics, Ministry of Commerce and Industry, Spices Board Cochin*

